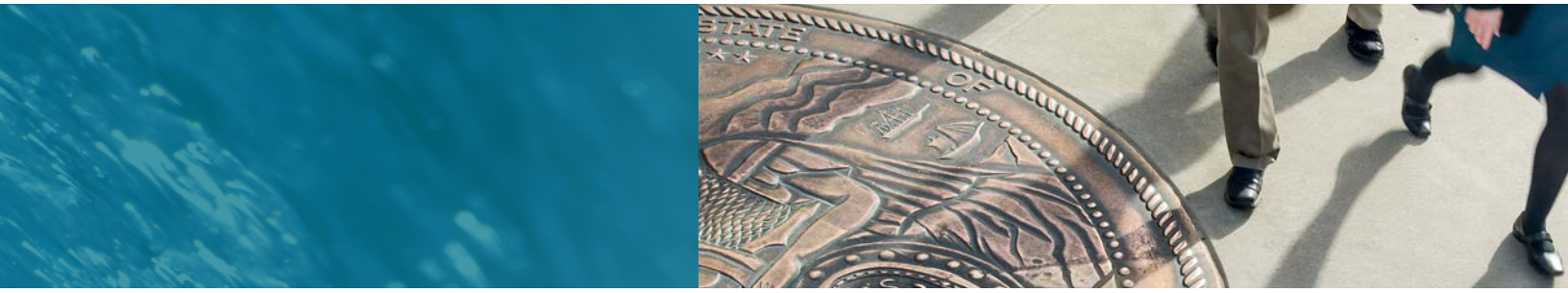
Strengthening Government Alignment



State agencies are working to align policies, planning, regulations, funding, and implementation of Update 2013 objectives and related actions. At the regional level, local governments and districts also are collaborating in the same way. At both levels of government, the common goal is to expedite and reduce the cost of projects that deliver multiple, diverse benefits.

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About This Chapter

California's water management system is large, complex, and fragmented. Achieving successful implementation of integrated water management (IWM) requires communication, cooperation, collaboration, and alignment among decision-makers at all levels of federal, tribal, State, regional, and local entities. The *California Water Plan Update 2013* (Update 2013) is the State's water plan, and it is not an isolated effort of one agency. This chapter explores the many parts of California water management and the mechanisms leading to alignment of government policies and practices. To achieve this, the chapter cross-references and demonstrates coordination and collaboration with other State government programs to provide consistent strategic direction, goals, objectives, and actions.

This chapter describes the Water Plan State Agency Steering Committee as a key feature of Update 2013 and its efforts to create a plan that embraces all relevant State government plans, programs, policies, and regulations (see Box 4-1). The collaboration of the committee has expanded since *California Water Plan Update 2009* (Update 2009), growing to 28 State government agencies and departments with jurisdictions over diverse aspects of water resources.

The chapter also:

- Outlines key principles and goals for agency alignment.
- Provides a general overview of water management institutions and governance in California.
- Explains the roles of multiple agencies in regards to water.
- Explains the process for identifying and integrating recommendations from 36 featured State plans.
- Describes how featured State plans were used to develop and augment content in Update 2013.
- Concludes with a recap of the implications of the existing policy framework of featured State plans to shape, guide, and constrain water governance in California.

Strengthening Government Alignment

One of the three themes for Update 2013 (as outlined in Chapters 1 and 3 of this volume) is strengthening government alignment. The theme emphasizes the importance of aligning strategies and actions introduced in Update 2009. Agency alignment will expedite and reduce the cost of the implementation of resource management strategies (RMSs) and help ensure efficient achievement of multiple IWM objectives. Alignment does not alter agencies' authority or responsibility, but instead yields a result of agencies working together better.

Update 2013 promotes strategies and practices for significant improvements in government agency alignment. This includes better communication and collaboration to implement IWM activities while protecting and enhancing natural resources.

Box 4-1 Water Plan State Agency Steering Committee Member Agencies

Air Resources Board

Business, Transportation, and Housing Agency

California Coastal Commission

California Emergency Management Agency (Cal EMA)

California Energy Commission

California Environmental Protection Agency (Cal/EPA)

California Public Utilities Commission

California State Board of Food and Agriculture

California Water Commission

Delta Stewardship Council

Department of Boating and Waterways

Department of Conservation

Department of Fish and Wildlife

Department of Food and Agriculture

Department of Forestry and Fire Protection (CAL FIRE)

Department of Housing and Community Development

Department of Parks and Recreation

Department of Public Health

Department of Toxic Substances Control

Department of Water Resources

Governor's Office of Planning and Research

Native American Heritage Commission

Natural Resources Agency

Ocean Protection Council

Sierra Nevada Conservancy

State Lands Commission

State Water Resources Control Board

Strategic Growth Council

Laws and regulations provide the framework for basic community safety and water supply needs and ensure a healthy environment, vibrant economy, and social equity. They also help meet many California Water Plan (CWP) goals. At the same time, within the context of IWM, many requirements designed for single objectives can appear to work at cross purposes as multi-benefit projects often have more complex considerations that require trade-offs and balancing needs.

Often those who implement multi-benefit and IWM project must navigate California's labyrinth of laws and regulations. This sometimes leads to delaying projects and mounting planning and compliance costs. These impediments can ultimately create significant difficulties in meeting community safety, environmental, or economic goals along with achieving goals outlined in Update 2013. This may even be true for small projects that are well planned, have the voluntary support of the community and private landowners, and would provide multiple benefits.

Some project participants, such as landowners and investors, which have gone through the permitting process, are unwilling to tackle the process again. Those who have heard about the difficulties second-hand may opt out when presented with opportunities to contribute.

The solution is not to remove the safeguards of agency oversight. Project planning in California is technically complex and location-appropriate. These complexities exist because there are wide varieties of climates, landforms, and institutions as well as a very diverse, place-based range of cultures that can be described as anthrodiversity (e.g., the human aspect of biodiversity that denotes the value of sustaining varied human habitats, such as rural, suburban, and urban communities). This means achieving IWM requires that data management, planning, policy-making, and regulation occur in a very collaborative and regionally appropriate manner. The ultimate product of the collaboration is a composite of diverse input and data from a large variety of elected officials, opinion leaders, stakeholders, scientists, and subject experts. Sustainable outcomes will rely on a blend of subject expertise and perspectives woven together into comprehensive place-based and regionally appropriate policies and implementation.

The Update 2013 goals for agency alignment are based on several key principles:

- Agencies will remain autonomous.
- Action will be voluntary.
- No new infrastructure or planning effort will be created to manage alignment.
- Action will occur at multiple organizational levels.
- No single agency can solve some of the presenting issues by itself.

Instead of creating new institutions or organizational structures to manage alignment, agencies are encouraged to utilize simple self-organizing principles to collaborate and coordinate their activities in a manner that supersedes traditional silos and hierarchical management approaches. This is done with an understanding that alignment emerges from frequent interactions with three basic ingredients:

- Participants need to engage in strong, dynamic non-linear action and work across multiple organizational boundaries, not just up and down a chain of command. These interactions often result in immediate positive and negative feedback about what works, could work, or will need to be reconsidered so that only the best options are pursued.
- Participants need to take advantage of opportunities to interact and align as they become available while continuing to explore future potential interaction.
- The process of alignment consists of multiple interactions, similar to balancing while riding a bicycle, with continuous adjustments as requirements evolve.

Strides have been made to improve alignment with the formation and engagement of Water Plan State Agency Steering Committee, the Water Plan Federal Agency Network (FAN), and dozens regional water management groups. However, federal, State, tribal, and local governments do not

yet collaborate to the degree necessary to effectively manage the challenges described above. Examples of impacts from insufficient government alignment include planning and permitting costs of projects have been increasing as a portion of total planning and implementation costs. For some smaller infrastructure and ecosystem enhancement activities, permitting costs have exceeded the implementation and acquisition costs. In many other cases, program or project implementation has yet to occur despite decades of planning and permitting activities, even as the intended benefits of these programs and projects are forgone as a result of the delays.

At the same time, funding and stakeholder support must occur prior to the effective delivery of desired IWM benefits. Enough certainty or confidence in the planned IWM activity is required to receive stakeholder support through the public administration process and, ultimately, receive funding from investors. None of these things can occur without extensive collaboration throughout the entire planning process.

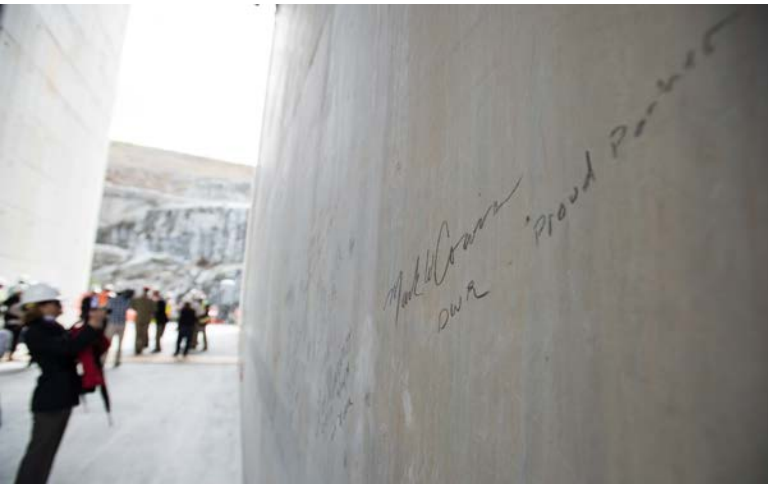
If all partners have the same understanding of the project regardless of their individual needs, the project can be implemented more easily. Collaboration necessary to achieve stronger government agency alignment begins with establishing a common understanding at every stage of project or program development. Different partners have different perspectives on what they hope a project or program should achieve. For example, those implementing a project may think very differently about a project than a regulatory agency or those who are responsible for operating and maintaining a facility would think about it. State agencies may have different perspectives on a project. Each partner is influenced by public and stakeholder advocacy for system improvements and operations. In turn, this advocacy influences government policy-makers and financiers at the State, federal, tribal, local, and regional government levels.

The purpose for emphasizing collaboration and strengthening alignment throughout the Update 2013 process goes well beyond sharing of information and project updates to stakeholders. Collaboration is required to help ensure that resource management recommendations achieve the desired outcome by vetting, integrating suggestions, and ultimately creating IWM recommendations that are implementable and supported by stakeholders and communities. It also helps create a CWP update process and a document that is accurate, complete, and clear.

Following are some examples of crosscutting practices that agencies can take to improve alignment. Many of these and others are represented in Chapter 8, “Roadmap For Action,” in this volume.

1. Identify all other agencies with overlapping or related responsibilities and engage them early and often during planning.

2. Respect and value the roles and responsibilities of other agencies (e.g., not seeking to affect other agencies’ budgets, responsibilities, or positions negatively).



3. Work together to identify common goals for IWM.

4. Strive to align goals and recommendations across all agencies’ plans.

5. Use an inclusive, transparent, and collaborative process to increase trust and improve relationships among agencies.

6. Coordinate monitoring and research on the highest priority innovations.

Folsom Dam Joint Federal Project — U.S. Army Corps of Engineers, U.S. Bureau of Reclamation, DWR, Central Valley Flood Protection Board, and Sacramento Area Flood Control Agency working together to achieve a 200-year level of flood protection for Sacramento. (April 2014)

7. Use adaptive management to provide a framework for developing an accurate and common understating of natural and human-made systems and potential solutions.
8. Engage all levels of relevant participants (those doing the on-the-ground work up to those having a high level of oversight), starting at the early stages of planning.
9. Create a planning clearinghouse, which would manage data and a master calendar.
10. Develop fundamental principles that would guide alignment, which would be adopted jointly by State agencies.
11. Create a matrix showing where regulatory processes align, clash, or leave gaps.

Water Management and Governance in California

As noted above, California has a large and complex water system with highly decentralized governance that involves State and federal agencies, tribal governments, thousands of local agencies, districts, private firms, millions of households, and thousands of farms. Decentralization is important for autonomy and daily management, planning, and policy-making. Even so, competing and conflicting roles and responsibilities can make it difficult to integrate regional water management. Following is an overview of California's water management system. Creating a common understanding of its parts will, in itself, lead to better alignment.

Legal Framework

California's water governance structure has ancient roots in the oldest surviving common law in history, the public trust doctrine. Additional guidance for California is provided through the following:

- Terms and conditions of statehood granted by the federal government.
- California State Constitution.
- Code and statute including propositions.
- Regulations.
- Court mandates.

The concept of the public trust was developed in America as many independent states joined the original 13 colonies. The states were granted sovereign rights to the commons (water, air, and land) and sovereign responsibility for its care. Since then, the public trust doctrine has been used extensively to protect the public's interest in water. The courts have ruled water is owned by everyone and not by any one entity. Thus, protection must be provided by its steward, state government. This interpretation has been upheld by the U.S. Supreme Court. Some, but not all, states include a water code in their state constitution.

Surface Water Rights

Water rights laws in California and in the rest of the West are markedly different from the laws governing water in the East. Historic uses and patterns of settlement, seasonal, geographic, and quantitative differences in precipitation caused California's system to develop into a unique blend

of primarily two different kinds of water rights — riparian and appropriative. Other types of water rights exist in California as well, among them are reserved rights (water set aside by the federal government when it reserves land for the public domain and tribes) and pueblo rights (a municipal right based on Spanish and Mexican law).

Riparian Rights

Riparian rights usually come with owning a parcel of land that is adjacent to a source of water. When it became a state, California adopted the English common law familiar to the Eastern seaboard; such law also included the riparian doctrine.

A riparian right entitles the landowner to use a correlative share of the water flowing past his or her property for use on that property. Riparian rights do not require permits, licenses, or government approval, but they apply only to the water, which would naturally flow in the stream. Riparian rights do not entitle a water user to divert water to storage in a reservoir for use in the dry season or to use water on a separate parcel of land that is non-riparian. Also, the water user cannot use riparian water on land outside of the watershed. With rare exception, riparian rights remain with the property when it changes hands, although parcels severed from the adjacent water source generally lose their right to the water.

Riparian rights still have a higher priority than appropriative rights (discussed below). The priorities of riparian rights holders generally carry equal weight. All share the shortage among themselves during a drought.

Appropriative Rights

Appropriative water rights generally pertain to non-riparian uses and storage of water from a time of plenty to one of scarcity. Appropriative water rights, as they exist today, came about as a result of a series of historical events.

Water rights laws in California were set on a different course in 1849, when fortune seekers flocked to the state after the discovery of gold. Water development proceeded on a scale never before witnessed in the United States as these "49ers" built extensive networks of flumes and waterways to work their claims. The water carried in these systems often had to be transported far from the original river or stream. These self-governing, maverick miners applied the same "finders-keepers" rule to water that they did to their mining claims. Water belonged to the first miner to assert ownership.

To stake their water claims, the miners developed a system of "posting notice," which signaled the birth of today's appropriative rights system. It allowed others to divert available water from the same river or stream, but their rights existed within a hierarchy of priorities. This "first in time, first in right" principle became an important feature of modern California water rights laws.

In 1850, California entered the Union as the 31st state. One of the first actions taken by its lawmakers was to adopt the common law of riparian rights. One year later, the Legislature recognized the appropriative right system as having the force of law. The appropriative right system continued to increase in use as agriculture and population centers blossomed and ownership of land was transferred from the State and federal governments to private ownership.

Up to the early 1900s, appropriators, most of them miners and non-riparian farmers, had simply taken control of water and used what they wanted. Sometimes notice was filed with the county recorder, but no formal permission was required from any administrative or judicial body.

The Water Commission Act of 1914 established today's permit process. This legislation created the agency that evolved into the State Water Resources Control Board (SWRCB) and granted it the authority to administer permits and licenses for California's surface water. The act was the predecessor to today's California Water Code (CWC) provisions governing appropriation.

These post-1914 appropriative rights are governed by the hierarchy of priorities developed by the 49ers. In times of shortage, the most recent (junior) right holder must be the first to discontinue the use of the natural flow of the water body. Each right's priority dates to the time the permit application was filed with the SWRCB. Although pre- and post-1914 appropriative rights are similar, post-1914 rights are subject to a much greater degree of scrutiny and regulation by the SWRCB.

The CWC establishes a procedure for the SWRCB to designate stream systems as fully appropriated. Designating a stream as such precludes the SWRCB from accepting any application to appropriate water from a specified stream system, except where the proposed application is consistent with the designation.

Beneficial Use

The conflicting nature of California's dual water rights system prompted numerous legal disputes. Unlike appropriative users, riparian rights holders were not required to put water to a reasonable and beneficial use. This clash of rights eventually resulted in a constitutional amendment (Article X, Section 2 of the California Constitution) that requires all use of water to be "reasonable and beneficial." These "beneficial uses" have currently include municipal and industrial uses, agricultural irrigation, hydroelectric generation, livestock watering, fish and wildlife protection, recreational use, and aesthetic enjoyment.

Per CWC Section 1707, individuals or groups of individuals can change an existing beneficial use to dedicate some or all of the water under their water right(s) to instream beneficial uses by submitting a petition for instream flow dedication. For example, some have pursued the concept of leasing surface water as a means of improving instream flows for salmon and steelhead by paying fair compensation to water right holders for the temporary instream use of all or part of their water use. Using CWC Section 1707 ensures that water right holders who participate in this process will not lose ownership of their water rights.

Fully Appropriated Streams

CWC Sections 1205 through 1207 establish a procedure for the SWRCB to adopt a declaration designating stream systems that are determined to be fully appropriated either year-round or during specified months. Placing a stream on the declaration precludes the SWRCB from accepting any application to appropriate water from a specified stream system, except where the proposed application is consistent with the declaration. California Code of Regulations, title 23, section 871 provides that the SWRCB may revoke or revise the declaration upon its own motion or upon petition of any interested person.

Groundwater Rights

In most areas of California, overlying landowners may extract percolating groundwater and put it to beneficial use. California does not have a permit process for regulating groundwater use. In several basins, however, groundwater use is subject to regulation in accordance with court decrees that adjudicated the groundwater rights within the basins.

The California Supreme Court decided in the 1903 case, *Katz v. Walkinshaw*, that the doctrine of reasonable use (as defined in CWC Section 100), which governs other types of water rights, also applies to groundwater. Previously, the English system of unregulated groundwater pumping was dominant, but this proved to be inappropriate to California's semiarid climate. This California Supreme Court case established the concept of overlying (or "correlative") rights, in which the rights of others with land overlying the aquifer must take reasonable use into account. Later court decisions established that groundwater may be appropriated for use outside the basin, although appropriator's rights are subordinate to those with overlying rights.

Conjunctive management of surface and groundwater supplies has opened up a new set of challenges, with regard to the State's somewhat fragmented surface and groundwater laws. Recharge and storage of surface water in a groundwater basin is legally viewed as though the storage were above ground. Any appropriation of water to be stored underground must be for a beneficial purpose and place of use, as is the case for surface storage. This means that groundwater storage applicants must declare the place and purpose of a beneficial use of the water to be stored. Concerns have been raised that it is difficult for groundwater recharge project applicants to specify future purpose and place of use. Nonetheless, without this specification, State regulators cannot corroborate the stated beneficial use. Further, if a surface water rights holder petitions to change their water rights to include the recharge of groundwater, their existing water rights could be put in jeopardy as a result of the petitioning process. This tends to discourage water rights holders from seeking the addition of groundwater recharge to their existing water rights. Some interests have proposed as a solution that groundwater recharge be declared a beneficial use, in which case the applicant would not have to specify place of use.

Tribal and Federal Reserved Water Rights

The federal-tribal relationship is complex. It is built around the doctrine of trust responsibility and a composite of factors. Water rights for federally recognized tribes are similarly complex and flow from the federal-tribal relationship, treaties, statutes, agreements, and are interpreted in case law.

In some cases, rights may include access to water for dependent uses such as fishing. In *United States v. Winans* (1905), the Yakima Nation went to court to preserve the "right of taking fish at all usual and accustomed places, in common with citizens of the Territory, and of erecting temporary buildings for curing them."

The U.S. Supreme Court upheld the Yakima Nation's right, even when the usual and accustomed places were owned by non-Native Americans. The court noted that the right to fish and to access traditional fishing grounds was not a special right granted by the government through treaty. Rather, the treaty simply acknowledged a right the Native Americans already possessed and that was reserved for their current and future use.

Another key area of federal water law involves the idea of water for reserved federal lands. In *Winters v. United States* (1908), the federal government went to court to prevent diversion of water that precluded water flowing to a tribal reservation. The result, called the Winters Doctrine, holds that land without water is valueless if water is essential for the purpose of the land. In this case, the purpose was tribal agriculture and ranching. The courts have also used the Winters Doctrine — reserving sufficient water to fulfill the purpose of reserved land — in deciding water rights for other kinds of reserved federal lands such as national forests and wilderness areas.

Pueblo Water Rights

Pueblo water rights are those exercised by a municipal successor to a Spanish/Mexican pueblo. The municipal successor must have taken possession of the right as of March 3, 1854. Only two pueblo water rights have been adjudicated in California — Los Angeles and San Diego. A pueblo water right is the highest priority (first in line) water right in California. It attaches to surface flow, including tributaries, and tributary groundwater of streams within the historic boundaries of the pueblo.

The quantity is determined by present municipal needs and grows over time. It cannot be lost by non-use or prescription and it is not subject to public trust claims although prohibition against waste and unreasonable use applies (Katz 2007).

Human Right to Water

On September 25, 2012, California Governor Edmund G. Brown, Jr. signed Assembly Bill (AB) 685 into law to ensure universal access to clean water. AB 685 places the human right to water at the center of State policy and underscores the role of State agencies in addressing the impact of unsafe water on humans. It requires State agencies to consider the human right to water when "revising, adopting, or establishing policies, regulations, and grant criteria" that impact water used for domestic purposes.

The bill, which added Section 106.3 to the CWC, reads:

- It is hereby declared to be the established policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.
- All relevant state agencies, including the department, the state board, and the State Department of Public Health, shall consider this state policy when revising, adopting, or establishing policies, regulations, and grant criteria when those policies, regulations, and criteria are pertinent to the uses of water described in this section.
- This section does not expand any obligation of the state to provide water or to require the expenditure of additional resources to develop water infrastructure beyond the obligations that may exist pursuant to subdivision (b).
- This section shall not apply to water supplies for new development.
- The implementation of this section shall not infringe on the rights or responsibilities of any public water system.

In the report *The Human Right to Water Bill in California, An Implementation Framework for State Agencies* (Salceda et al. 2013), the International Human Rights Law Clinic at University of California, Berkeley, School of Law provides an explanation of the key terms of the new law. The report explains the human right to water is more than just a declaration in statute. It creates an ongoing obligation for State agencies to consider the human right to water in every relevant agency decision and activity.

The law includes a list of specific values — safety, affordability, and accessibility — that agencies must consider when revising, adopting, or establishing policies, regulations, and grant criteria related to domestic water use. The courts have found in similar situations that this type of duty cannot be fulfilled through a single administrative action by a State agency. The bill's legislative intent was "to create a State policy priority and direct State agencies to explicitly consider the human right to water within their relevant administrative processes, measures, and actions."

By considering these values, State agencies can engage in responsive government decision-making and targeted programming that addresses the problems faced by disadvantaged and marginalized communities. The report concludes, "Human rights principles also foster a comprehensive approach to policy-making by focusing on underlying causes and systemic solutions in addition to individual remedies."

Water Law and Policy — Land and Agriculture

More than 43 percent of the land in California is used for food production. In contrast, California's urban use is 5 percent of California's land. Federal and State laws and policies tie water and agriculture together. When Congress passed the original Reclamation Act of 1902, the goals for water subsidies were to make the desert bloom.

Agricultural land has also been recognized in the California Constitution as meriting special status. This special status is implemented, in part, through the California Land Conservation Act (CLCA) of 1965, which is also called the Williamson Act. In the Legislative Declaration of the CLCA, the Legislature finds "That the preservation of a maximum amount of the limited supply of agricultural land is necessary to the conservation of the state's economic resources, and is necessary not only to the maintenance of the agricultural economy of the state, but also for the assurance of adequate, healthful and nutritious food for future residents of this state and nation."

A variety of codes and policies such as the California Agricultural Vision, aka AgVision (California Department of Food and Agriculture 2012), articulate the preeminence of agriculture as critical to the CWP emphasis on a healthy environment, vibrant economy, and social equity.

A recent report highlights a growing concern with food security, which is access to healthy food by a large number of Californians (Chaparro et al. 2012). Previous CWP updates have also reported on concerns regarding the adequacy of food as a national security issue and the Obama administration has identified food security as an element of foreign policy.

San Luis Obispo County. While in recent years strawberries and wine grapes have been the county's most valuable crops, artichokes grow well in the cool humid climate near the coast.

State and Federal Agencies/Departments with Water-Related Roles and Responsibilities

The State and federal governments are responsible for representing and protecting the public trust. In general, the featured agencies fill, often simultaneously, five general water-related stewardship roles:

- Regulator.
- Landowner.
- Service provider.
- Funder.
- Planner, technical advisor.

Those agencies that are landowners and service providers may also be regulated. Together, in addition to roles as landowners, the State and federal governments provide assistance, guidance, scientific review, monitoring, and oversight to local governments (city- and county-owned municipal water systems), Native American tribes, and special districts.

California Government Executive Branch, Boards, and Commissions

Many State agencies and departments oversee California's water resources. DWR operates the State Water Project and is responsible for overall water supply planning. The SWRCB integrates water rights and water quality decision-making authority and is responsible for overall water quality planning. The SWRCB and the nine regional water quality control boards (RWQCBs) are responsible for protecting California's water resources. According to the Porter-Cologne Water Quality Control Act, water quality control plans (also known as basin plans) are prepared for each of the 10 hydrologic regions and by statute become part of the CWP. Below are other State agencies and departments and their roles in water management.

- **California Air Resources Board (ARB).** Promotes and protects public health, welfare, and ecological resources through the effective and efficient reduction of air pollutants. Through its effort to reduce greenhouse gas emissions, ARB plays a role in ensuring that water is managed and used in ways that minimize greenhouse gas emissions.
- **California Business Transportation and Housing Agency (BTH).** Oversees the activities of 13 departments and several economic development programs and commissions. Its operations address financial services, transportation, affordable housing, real estate, managed health care plans, and public safety.
- **California Coastal Commission.** Plans and regulates land and water uses in the coastal zone consistent with the policies of the California Coastal Act.
- **California Department of Parks and Recreation (California State Parks).** Manages more than 270 State park units, which protect and preserve culturally and environmentally sensitive structures and habitats, threatened plant and animal species, as well as ancient Native American sites, historic structures, and artifacts. California State Parks is responsible for almost one-third of the state's scenic coastline and manages many of the coastal wetlands, estuaries, beaches, and dune systems.

- **California Division of Boating and Waterways (DBW).** Became a division within the Department of Parks and Recreation in 2013. DBW develops public access to the waterways and promotes on-the-water safety with programs that include aquatic pest control in the Sacramento-San Joaquin Delta, coastal beach erosion control, and grants for vessel sewage pumpout stations.
- **California Department of Conservation (DOC).** Provides services and information that promote environmental health, economic vitality, informed land-use decisions, and sound management of California's natural resources. This department also manages a State watershed program.
- **California Department of Fish and Wildlife (DFW).** Regulates and conserves the State's wildlife and is a trustee for fish and wildlife resources. It is the State's primary department for managing native fish, wildlife, plant species, and natural communities for their intrinsic and ecological value. It serves a regulatory role by enforcing the California Endangered Species Act and Fish and Game Code Section 1600, Streambed Alteration Agreements.
- **California Department of Food and Agriculture (CDFA).** Promotes food safety, protects public and animal health, and protects California from exotic and invasive plant pests and diseases.
- **California Department of Forestry and Fire Protection (CAL FIRE).** Manages and protects California's natural resources. Provides fire protection and stewardship for more than 31 million acres of California's privately owned wildlands and offers varied emergency services in 36 of the state's 58 counties via contracts with local governments.
- **California Department of Pesticide Regulation (DPR).** Protects human health and the environment by regulating pesticide sales and use, and by fostering reduced-risk pest management. Plays a significant role in monitoring the presence of pesticides and in preventing further contamination of the water resource.
- **California Department of Public Health (CDPH).** Regulates public drinking water systems, oversees water recycling projects, grants permits for water treatment devices, certifies drinking water treatment and distribution operators, supports and promotes water system security, provides support for small water systems and for improving technical, managerial, and financial capacity, oversees the Drinking Water Treatment and Research Fund for methyl tertiary-butyl ether (MTBE) and other oxygenates in drinking water, and provides funding opportunities for water system improvements, including funding under Proposition 84, Proposition 50, and the Safe Drinking Water State Revolving Fund.
- **California Department of Toxic Substances Control (DTSC).** Provides technical oversight for the characterization and remediation of hazardous waste in soil and water.
- **California Emergency Management Agency (Cal EMA).** As part of the governor's efforts to streamline the State's emergency response capabilities, AB 38 combined the Office of Emergency Services and the Governor's Office of Homeland Security into this cabinet-level State agency in 2009. Cal EMA is responsible for overseeing and coordinating emergency preparedness, response, recovery, and homeland security activities in the state.
- **California Energy Commission.** Responsible for the forecast, regulation, and development and promotion of technology as the State's primary energy policy and planning agency.
- **California Environmental Protection Agency (Cal/EPA).** Restores, protects, and enhances the environment to ensure public health, environmental quality, and economic vitality.
- **California Department of Resources Recycling and Recovery (CalRecycle).** Protects the environment and preserves resources by empowering Californians to reduce, reuse, and recycle.

- **California Public Utilities Commission (CPUC).** Regulates privately owned water and other utility companies.
- **California Water Commission (CWC).** Advises the Director of DWR on matters within the department's jurisdiction, promulgates rules and regulations, and monitors and reports on the construction and operation of the State Water Project. California's comprehensive water legislation, enacted in 2009, gave the commission new responsibilities regarding the distribution of public funds set aside for the public benefits of water storage projects, and developing regulations for the quantification and management of those benefits.
- **Central Valley Flood Protection Board (CVFPB).** Plans flood control along the Sacramento and San Joaquin rivers and their tributaries in cooperation with the U.S. Army Corps of Engineers.
- **Colorado River Board of California (CRB).** Protects California's rights and interests in the water resources provided by the Colorado River.
- **Delta Protection Commission (DPC).** Responsible to adaptively protect, maintain, and where possible, enhance, and restore the overall quality of the Delta environment consistent with the Delta Protection Act.
- **Delta Stewardship Council (DSC).** Responsible for achieving the coequal goals of providing a more reliable water supply for California and to protect, restore, and enhance the Delta ecosystem. The DSC has developed the Delta Plan, California's resource management plan for resolving the Delta's long-standing conflicts, and has regulatory authority over covered actions. The Delta Plan will also guide protection and enhancement of the unique resources, culture, and values of the Delta as an evolving place.
- **Governor's Office of Planning and Research (OPR).** Provides legislative and policy research support for the Governor's Office. The State Clearinghouse, a department within OPR, coordinates the State-level review of environmental documents pursuant to the California Environmental Quality Act (CEQA), provides technical assistance on land use planning and CEQA matters, and coordinates State review of certain federal grant programs.
- **Native American Heritage Commission (NAHC).** Protects Native American burials from vandalism and inadvertent destruction, provides a procedure for the notification of most likely descendants regarding the discovery of Native American human remains and associated grave goods, brings legal action to prevent severe and irreparable damage to sacred shrines, ceremonial sites, sanctified cemeteries, and place of worship on public property, and maintains an inventory of sacred places.
- **California Natural Resources Agency (CNRA).** Restores, protects, and manages the state's natural, historical and cultural resources for current and future generations using creative approaches and solutions based on science, collaboration, and respect for all the communities and interests involved.
- **Ocean Protection Council (OPC).** Ensures that California maintains healthy, resilient, and productive ocean and coastal ecosystems for the benefit of current and future generations.
- **Sierra Nevada Conservancy (SNC).** Initiates, encourages, and supports efforts that improve the environmental, economic, and social well-being of the Sierra Nevada region, its communities, and the citizens of California. The region, which comprises all or part of 22 counties and more than 25 million acres, is California's principal watershed that supplies 65 percent of the developed water supply.
- **California State Lands Commission (CSLC).** Manages public trust lands of the state, which includes the beds of all naturally navigable rivers, lakes, and streams, as well as the

state's tide and submerged lands along more than 1,100 miles of California's coastline. The public trust doctrine is applied to ensure that the public trust lands are used for water-related purposes, including the protection of the environment, public recreation, and economic benefit to the citizens of California.

- **Strategic Growth Council (SGC).** Coordinates the activities of State agencies and partners with stakeholders to promote sustainability, economic prosperity, and quality of life for all Californians.

Federal Government

The federal government is a significant landowner in California. Approximately 48 million, or 48 percent, of the 100,206,720 total state acres are in federal ownership (Gorte et al. 2012). Most of this land is California's forest and Sierra Nevada regions, and the southeastern rural areas. For example, Inyo and Mono counties respectively have 92 and 84 percent federal ownership. Some counties with large urban centers have significant federal presence. San Bernardino County has more than 80 percent federal land ownership.

Management of federal lands in the state is particularly important to water mangers as these properties often contain significant watersheds and headwaters.

The largest federal landowners in California are the Bureau of Land Management and the U.S. Forest Service, followed by the National Park Service. The Department of Defense and the U.S. Fish and Wildlife Service also maintain large tracts of property. Beyond land ownership, many federal agencies play important roles in the planning, regulation, and management of California's water resources and water dependent uses. Some key federal agencies involved with water in California are:

- **U.S. Department of Agriculture (USDA).** Provides services and leadership on food, agriculture, natural resources, rural development, nutrition, and related issues.
- **Department of Defense (DOD).** Manages an inventory of installations and facilities to keep Americans safe from outside aggression. DOD maintains a significant land base in multiple California locations with water, environmental, and ecosystem management requirements. DOD manages more than 30 million acres of land nationally.
- **U.S. Army Corps of Engineers (USACE).** Part of DOD that plans, designs, builds, and operates water resources projects such as navigation, flood control, environmental protection, disaster response, and recreation.
- **U.S. Environmental Protection Agency (EPA).** Protects human health by safeguarding the natural environment.
- **Federal Energy Regulatory Commission (FERC).** An independent agency that regulates the interstate transmission of natural gas, oil, and electricity. FERC also reviews and regulates proposals to license hydropower projects.
- **Federal Emergency Management Agency (FEMA).** As a part of the Department of Homeland Security, provides disaster response and recovery support including extreme weather events such as storms and drought. FEMA oversees the National Flood Insurance Program and the Flood Hazard Mapping Program.
- **U.S. Fish and Wildlife Service (USFWS).** Conserves, protects, and enhances fish, wildlife, plants, and their habitats.

- **U.S. Forest Service (USFS).** As part of the USDA, manages forests, watersheds, and other natural resources. The USFS maintains multiple areas in California containing major headwaters.
- **U.S. Geological Survey (USGS).** Provides water measurement and water quality research.
- **U.S. Department of the Interior (DOI).** Protects America's natural resources and heritage, honors cultures and tribal communities, and supplies energy resources.
- **Bureau of Land Management (BLM).** Part of Department of the Interior, manages federal lands for multiple purposes including energy development, grazing, and recreation. The BLM provides land management in many watersheds.
- **Bureau of Indian Affairs (BIA).** As part of the U.S. Department of the Interior, promotes economic opportunity and carries out the responsibility to protect and improve the trust assets of Native Americans, Native American tribes, and Alaska Native tribes.
- **Indian Health Services (IHS).** Provides comprehensive primary health care and disease prevention services for Native Americans. IHS maintains programs that provide technical and financial assistance to Native American tribes and Alaska Native Communities (tribes) for the cooperative development and continuing operation of safe water, wastewater, solid waste systems, and related support facilities.
- **National Oceanic and Atmospheric Administration (NOAA).** As part of the Department of Commerce, a scientific agency focused on the conditions of the oceans and the atmosphere. NOAA warns of dangerous weather, charts seas and skies, guides the use and protection of ocean and coastal resources, and conducts research to improve understanding and stewardship of the environment.
- **National Marine Fisheries Service (NMFS).** Part of the National Oceanic and Atmospheric Administration. NMFS protects and preserves living marine resources, including anadromous fish.
- **National Park Service (NPS).** As part of the Department of the Interior, manages national parks, including their watersheds.
- **Natural Resource Conservation Service (NRCS).** As part of the U.S. Department of Agriculture, provides technical and financial assistance to conserve, maintain, and improve natural resources on private lands.
- **U.S. Bureau of Reclamation (USBR).** As part of the Department of the Interior, operates the Central Valley Project (CVP), which is the largest water project in California, and regulates diversions from the Colorado River.
- **Rural Development (USDA RD).** As part of the U.S. Department of Agriculture, manages financial programs for essential public facilities and services such as water and sewer systems, emergency service facilities, and electric and telephone service. USDA RD promotes economic development by supporting loans. Provides technical assistance and information to help agricultural producers and cooperatives get started and improve the effectiveness of their operations.
- **Secretary's Indian Water Rights Office (SIWRO).** As part of DOI, manages, negotiates, and oversees implementation of settlements of Indian water rights claims, with the strong participation of Native American tribes, states, and local parties.
- **Western Area Power Administration.** Manages power generated by the Central Valley Project.

During the Update 2013 process, many federal agencies actively supported development of CWP content. USBR and USACE both engaged with DWR in joint planning and modeling efforts used for development of CWP data and tools and scenario development. The EPA entered into a joint planning effort for development of Update 2013 sustainability indicators and development of concepts like the water footprint. USGS has been engaged in multiple planning cycles to provide analytical support. The U.S. Forest Service has provided direct support to the CWP, starting with Update 2009, in the development and update of the resource management strategies and has been a key partner in Update 2013 in building multi-agency policies that support agency alignment. NRCS also became more actively engaged during Update 2013 and provided early support for the development of the sediment management resource management strategy, with direct involvement from the State Soil Scientist.

Tribal Governments, Organizations, and Communities

Just as historic uses, patterns of settlement, and seasonal, geographic, and quantitative differences in precipitation caused California's water system to develop differently than what is found in other states, the CWP definition of California Native American Tribe is also unique. It signifies all indigenous communities of California, including those that are not federally recognized, those that are federally recognized, and those with allotment lands, regardless of whether or not they own those lands. Additionally, because some water bodies and tribal boundaries cross state borders, this term includes indigenous communities in Oregon, Nevada, and Arizona that are impacted by water in California.

As described in the above section on water rights, the United States has a unique legal and political relationship with Native American tribes and entities as provided by the Constitution of the United States, treaties, court decisions, and federal statutes. As a result, tribal governments are one of many governmental entities that may be responsible for ensuring that the water is safe and available in sufficient quantities for its intended purpose. Tribes may also be involved in a wide range of water management activities within their borders from protecting and managing surface waters, including reservoirs, watershed protection of wetlands, which are home to a wide diversity of plants and animals, and flood management.

PG&E Main Canal near the community of Twain Harte, which supplies 95 percent of the drinking water to Tuolumne Utilities District customers, including both the Tuolumne Band and Chicken Ranch Rancheria of Me-Wuk Indians.

Tribal governments work in collaboration with such federal agencies as the EPA, Bureau of Indian Affairs, Indian Health Service, USBR, and the DOI, among others to meet their water resources needs. Tribal governments and communities may also participate in local, regional, and statewide water planning and management activities at their discretion.

Some federal laws also allow for tribes to be treated as having the same legal and regulatory status as States. This is important for tribes that may want to exercise their jurisdiction over a subject matter that federal law puts them on par with States. In particular, the Clean Water Act, the Safe Drinking Water Act, and the Clean Air Act all have varying provisions that treat tribes as states.

Even with a strong governance structure, many tribal communities are served by substandard water systems. Contaminated watersheds and

groundwater sources in many areas need major improvements. Multiple barriers often exist and extend beyond adequate funding to acquire updated infrastructure. Other issues include the affordability of ongoing operations and maintenance, and the ability to recruit and retain skilled personnel to manage these systems.

Water rights are also frequently mentioned by tribes as a source of contention. It is federal policy for tribal water right disputes to be resolved by negotiation rather than litigation. The DOI Secretary's Indian Water Rights Office (SIWRO) manages, negotiates, and oversees implementation of settlements of Native American water rights claims, with the strong participation of tribes, States, and local parties. SIWRO coordinates and supports federal settlement activities through 36 federal negotiation, assessment, and implementation teams working throughout the western United States. Staff on the federal teams comes from the DOI programs such as USBR and BIA.

While the federal government finds a settlement process is superior and less expensive than litigation, resolution of tribal water rights can be a lengthy and expensive process. Once settled, the right must then be implemented, which in many cases may take 5-15 years.

Tribes and California State Government

California has recognized the importance of creating a mutually respectful relationship with the tribes within its boundaries. To further this goal, Governor Brown issued Executive Order B-10-11 in 2011. The order:

- Established the position of Governor's Tribal Advisor within the Office of the Governor.
- Directed the Governor's Tribal Advisor to oversee and implement effective government-to-government consultation between the administration and tribes on policies that affect California tribal communities.
- Confirmed the Office of the Governor shall meet regularly with the elected officials of California Native American tribes to discuss State policies that may affect tribal communities.
- Directed every Executive Branch State agency to encourage communication and consultation with California Native American tribes.
- Directed agencies and departments to permit elected officials and other representatives of tribal governments to provide meaningful input into the development of legislation, regulations, rules, and policies on matters that may affect tribal communities.

Since 2011, the Resources Agency and other Executive Branch organizations have developed policies to implement the order.

Tribes and the California Water Plan

The California Water Plan Tribal Advisory Committee assists in ensuring tribal input is reflected in all aspects of the Update 2013 planning process. This input assists the State in addressing the complex water issues facing California Native American Tribes.

A document prepared for the 2013 Tribal Water Summit, hosted in part by the California Water Plan Tribal Advisory Committee, called the *Guiding Principles and Statement of Goals*

for Implementation, outlines three specific recommended actions to better integrate tribal considerations in the State's planning for water:

1. Tribes and State agencies should work together to develop strategies and approaches that incorporate traditional/tribal ecological knowledge better into water and water-related resource planning and management activities.

2. Tribes and State agencies should work together to develop strategies, educational materials, and recommendations that further the understanding of tribal uses of water and the broader role of water and access to water in tribal lifeways including subsistence and cultural practices.

3. Tribes and State agencies should work together to develop strategies and options for ensuring early and greater collaboration regarding water resource projects, as well as watershed and land use planning and management activities, especially where decisions impact tribal trust lands and/or traditional territories/homelands.

Public Agencies, Districts, Local Governments, and Investor-Owned Utilities

Local city and county governments and special districts have ultimate responsibility for providing safe and reliable water to their customers. More than 600 California water and irrigation districts are listed in the joint University of California, Riverside and the California State University, San Bernardino Water Resources Collections and Archives database.

In general, California has two methods for forming publicly managed special districts that develop, control, or distribute water: 1) enact a General Act under which the districts may be formed as set forth in the Act, and 2) enact a Special Act creating the district and prescribing its powers.

A 2010 list produced by the Senate Local Government Committee illustrates the complexity and magnitude of special districts that may be involved in some form of IWM activity is in Table 4-1.

There are more than 2,000 special districts, which is then combined with 58 counties and 482 incorporated cities that may be involved in some type of IWM activity. This does not include any of the agencies marked with an asterisk in the table, park districts, or fire districts that may have IWM responsibilities. Not all water suppliers and distributors are publicly managed. Mutual water companies, for example, are private corporations that perform water supply and distribution functions similar to public water districts. Many of the mutual water companies are small water systems. A small water system is defined as a water system for human consumption that has 15 or more service connections or regularly serves at least 25 individuals at least 60 days of the year. This includes any collection, treatment, storage, and distribution facilities. The California Department of Public Health (CDPH) is responsible for regulating these systems. In 31 of the 58 counties, CDPH has delegated local oversight to local primacy agencies (LPAs) for the regulation of public water systems serving fewer than 200 service connections. LPAs are county environmental health jurisdictions. LPAs regulate approximately 1,600 community water systems and 3,900 non-community water systems. Non-community systems are typically associated with a smaller number of users that may not be present year round, or transient locations like rest stops.

Table 4-1 Special Districts Involved in Some Type of IWM Activity

District Type	Number of Agencies	District Type	Number of Agencies
County Water Districts	166	Reclamation Districts	156
Resource Conservation Districts	96	California Water Districts	136
Irrigation Districts	94	County Sanitation Districts	73
Sanitary Districts	72	Public Utility Districts	54
Storm Water Drainage and Maintenance Districts	49	Water Agency or Authority	30
Flood Control and Water Conservation Districts	48	County Waterworks Districts	28
Municipal Water Districts	37	Drainage Districts	23
Water Conservation Districts	13	Levee Districts	14
Harbor and Port Districts	13	Water Storage Districts	8
Community Services Districts	325[a]	Municipal Utility Districts	5
Municipal Improvement Districts	5	Sewer District	1
Sanitation & Flood Control Districts	2	Water Replenishment Districts	2
Mosquito Abatement and Vector Control Districts	46[b]	Metropolitan Water District	1
County Service Areas	895[c]		

Source: California Senate Local Government Committee 2010

Notes:

[a] This number is likely smaller, as these districts often provide water, sewer and storm drain services but not always.

[b] These districts are sometimes involved in flood management and water storage issues due to concerns with standing water.

[c] Only a portion of the service areas provide services.

Investor-owned utilities in water activities are regulated by the California Public Utilities Commission (CPUC). CPUC regulates 152 water and sewer companies serving more than 23 percent of all Californians.

Integrated Regional Water Management Groups

Integrated regional water management (IRWM) is a voluntary, collaborative effort to manage all aspects of water resources in a region. IRWM crosses jurisdictional, watershed, and political

boundaries. It involves multiple agencies, stakeholders, individuals, and groups, and it addresses issues and differing perspectives of all the entities involved through crafting mutually beneficial solutions.

California has 48 IRWMs that are recognized by DWR. Most of these regions have an IRWM plan following principles established by the Legislature and guidelines developed by DWR. Some regions are developing their IRWM plans for the first time, while others are updating theirs. Individual IRWM plans deal with widely varying water resources conditions and establish regional goals and objectives. Table 4-2 shows key IRWM events.

At a minimum, a region is defined as a contiguous geographic area encompassing the service areas of multiple local agencies. Regions are defined to maximize integrated water management activities opportunities and effectively integrate water management programs and projects within a hydrologic region.

The Region Acceptance Process (RAP) is a component of the IRWM Program Guidelines. It is used to evaluate and accept an IRWM region into the IRWM grant program. The RAP is not a grant funding application; however, acceptance of the composition of an IRWM region into the IRWM grant program is required for DWR IRWM grant funding eligibility. (See Figure 4-1.)

IRWM is a prime example of integrated resource planning, which began in the late 1980s in the electric power industry, as a comprehensive approach to resource management and planning. When applied to water management, integrated resource planning is a systems approach that explores the cause-and-effect relationships between different aspects of water resource management, with an understanding that changes in the management of one aspect of water resources can affect others. Because water resources are often not tied to the boundaries of a single water management agency, a consensus-based, cross-jurisdictional, regional approach allows formulation of comprehensive solutions to regional water resource issues. The methods used in IRWM include a range of water resource management strategies, which relate to water supply, water quality, water use efficiency, operational flexibility, and stewardship of land and natural resources.

Resource Conservation Districts

Resource Conservation Districts (RCDs) are special districts and are a good example of strong local government. The 99 districts statewide are the center of locally led conservation in their communities and accomplish thousands of practical, hands-on conservation projects every year. Projects often involve agriculture and private land. Typical projects include:

- Water conservation.
- Watershed protection.
- Creek restoration.
- Streambank restoration.
- Habitat improvement.
- Fish passage.
- Hedgerow plantings.
- Community education.
- Grower workshops.

Table 4-2 Key IRWM Events

Year	Event
2002	Integrated Regional Water Management Act encourages local agencies to work cooperatively to manage local and imported water supplies to improve the quality, quantity, and reliability of those supplies.
2002	Proposition 50, the Water Security, Clean Drinking Water, Coastal and Beach Protection Act provides $500,000,000 to fund competitive grants for projects consistent with an adopted IRWM plan.
2005	*California Water Plan Update 2005* names IRWM as a key initiative to ensure reliable water supplies.
2006	Proposition 84, the Safe Drinking Water, Water Quality, and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 provides $1,000,000,000 for IRWM planning and implementation.
2006	Proposition 1E, the Disaster Preparedness and Flood Prevention Bond Act which provides, among other actions, $300,000,000 for stormwater projects that reduce flood damage and are consistent with an IRWM plan.
2008	Integrated Regional Water Management Planning Act provides a general definition of an IRWM plan as well as guidance to the Department of Water Resources about what IRWM program guidelines must contain. Guidelines include standards for identifying a region for the purposes of developing or modifying an IRWM plan.

- Native plantings.
- Creek cleanups.
- Educating agriculturists on better and new environmental practices, particularly around water conservation.
- Classroom visits.
- Fire prevention projects.
- Fire prevention education.
- Technical assistance to agriculturists.
- Watershed management.

Most RCDs do not receive taxpayer funding, and bring millions of dollars to local communities through conservation projects funded mainly through grants and private contributions. Those RCDs that receive tax dollars return every dollar at a 10 to 1 ratio.

Academic Institutions

California's public and private academic institutions play a vital role in California water management by providing research and other expertise to inform decision-making. Academics and policy experts from multiple universities are members of advisory councils, including those for the CWP, and prepare policy briefs to frame issues for public dialog. A small sample of CWP participation from California universities follows:

Figure 4-1 Integrated Regional Water Management Planning Regions Accepted or Conditionally Accepted by DWR as of Publication

The **International Center for Water Technology** (ICWT) is part of California State University, Fresno State University, and was established in 2001 to educate, promote, and assist in developing and adopting innovative technologies that improve water utilization, reduce energy demand, and impact air quality positively. ICWT is provides direct expertise for the Water Plan Technology Caucus.

Faculty from the **University of California, Davis** (UC Davis) supports many aspects of data and information development for the CWP, ranging from development of sustainability indicators to providing peer reviews for technical tools.

California State University, Sonoma assisted with development of easy-to-use land use planning tools that illustrate water-land decision options. This effort has been a center piece of work by the Water Plan Land Use caucus.

The **Water Resources Institute** (WRI) is part of California State University, San Bernardino. WRI partners with DWR to coordinate the Alluvial Fan Task Force composed of county supervisors, local flood managers, developers, land use/environmental interests and representatives of State and federal agencies. The members were charged with developing a Model Ordinance (see http://aftf.csusb.edu/documents/DRAFT_MODEL_ORDINANCE.pdf) and local planning tools that would provide a model for future land use decisions on alluvial fans.

The **Center for Collaborative Policy** (CCP), a unit of the College of Social Sciences and Interdisciplinary Studies at California State University, Sacramento, has provided neutral third party facilitation and technical advice on collaboration for the CWP since 2000.

State Agency Coordination through the Water Plan Steering Committee

To achieve comprehensive and integrated management of California's water resources, the Water Plan Steering Committee guided the development of Update 2009 (see Box 4-1). In the past, DWR had performed this role with little formal input from other State agencies. The Steering Committee collaborates to develop a more comprehensive CWP that strategically integrates California's water supply, water use efficiency, water quality, flood management planning, and environmental stewardship, as well as respective agency missions and goals.

Working together, the State agencies sought to improve water governance by taking action on the following:

- Review and revise the vision, mission, and goals of the CWP, and update its implementation plan. Develop multiple scenarios of future California water conditions and use these scenarios to evaluate different combinations of resource management strategies, called response packages, for a range of water demand and supply assumptions.
- Develop climate change scenarios to evaluate impacts on California's water resources and water systems and identify and recommend statewide and regional adaptation strategies.
- Update the regional reports for the 10 hydrologic regions and for Delta and Mountain counties as areas of special concern. Use information gained from the IRWM and local water and flooding efforts to describe critical issues, key initiatives, effectiveness of regional planning efforts, and region-specific response strategies.

- Update the 27 resource management strategies with current research and information and add three new strategies. Expand strategy narratives to describe their suitability for integrated flood management, new challenges, and their current and future implementation in various regions.
- Estimate and present actual water uses, supplies, and quality (water portfolios) for water years 2006 through 2010. Improve methods for representing consumptive and non-consumptive environmental water and where water reuse is occurring.
- Improve information exchange and data integration, data, and analytical tools to inform all CWP activities and decisions and to assist California water planners and managers.
- Incorporate findings and recommendations from featured State government plans and initiatives into Update 2013.

Agency Coordination through the Biodiversity Council

The California Biodiversity Council (CBC) was formed in 1991 to improve coordination and cooperation between the various resource management and environmental protection organizations at federal, State, and local levels. Strengthening ties between local communities and governments has been a focus of the council by way of promoting strong local leadership and encouraging comprehensive solutions to regional issues.

The council was not created to independently establish new projects, or to become another bureaucracy. Rather, its purpose is to discuss, coordinate, and assist in developing strategies and complementary policies for conserving biodiversity. Members exchange information, resolve conflicts, and promote development of regional conservation practices.

The council has 42 members, including 20 State agencies, 12 federal agencies, and 10 local governments. It is chaired by the Secretary of the California Natural Resources Agency and the California State Director of the Bureau of Land Management. The council meets 2-3 times a year on issues relating to natural resource conservation in California.

In 2012, collaboration between the council and the CWP update process was established to align planning processes better and to interact more efficiently with federal agencies. One result was a joint convening of a Workshop to Align Agency Conservation Plans, Policies, and Programs held in October 2012. The results of this workshop led to the February 6, 2013 California Biodiversity Council Meeting in Davis where the co-chairs committed to a new resolution for the council entitled Strengthening Agency Alignment for Natural Resource Conservation. The resolution includes:

- Increasing coordination with all levels of governments and agencies (federal, tribal, State, local), stakeholder groups, private landowners, and others.
- Increasing effectiveness through leveraging of existing networks, relationships, and multi-agency venues.
- Improving sharing of data, information, tools, and science among governments and agencies.
- Aligning planning, policies, and regulations better across governments and agencies and coordinate and streamline permitting to increase regulatory certainty.

Hope Valley Meadow, Sierra Nevada (May 2014). Restoration of the meadow is anticipated to begin in the fall of 2015. American Rivers has developed technical restoration designs, and the USFS is currently completing NEPA analysis for the project.

The resolution also includes 11 principles, 11 practices and tools, and several organizational actions. The full text of Strengthening Agency Alignment for Natural Resource Conservation is at http://biodiversity.ca.gov/2013resolution.html.

Companion State Plans and the California Water Plan

A major effort of the State Agency Steering Committee was to identify State planning processes, policies, plans, and procedures that had a direct connection with the CWP. The goal was to create awareness among agencies and the public of related planning documents. This assessment allows agencies to work collaboratively to leverage each other's resources and objectives and overcome barriers.

There are three tiers of State agency plans — companion, nexus, and featured. A review gathered 191 companion State agency plans with some nexus to the issues considered in the CWP. At least 68 of those plans, referred to as nexus plans, had direct relevance to Volume 3, *Resource Management Strategies*; 36 plans, referred to as featured plans, informed the objectives and related actions in Chapter 8, "Roadmap For Action," of Volume 1, *The Strategic Plan*. The plans focus on different resources and programs respective to their agencies, but each provides part of the overall framework of California's water governance.

Featured State Plans

The 36 featured plans in Update 2013 (a subset of the nexus plans) substantially inform the water planning process (Table 4-3). In some cases, such as plans of the SWRCB, the relationship is legally required. In others, the relationship draws from a mutual governance responsibility. In collaboration with the State Agency Steering Committee, the CWP recognizes and intentionally reflects and incorporates key objectives and actions of the featured plans. This intentional conciliation builds alignment across multiple planning processes and agencies. Below are short descriptions of the 36 plans.

2010 Strategic Fire Plan for California (Department of Forestry and Fire Protection)

The California Fire Plan is the State's road map for reducing the risk of wildfire. The Fire Plan is a cooperative effort between the State Board of Forestry and Fire Protection and the California Department of Forestry and Fire Protection (CAL FIRE). By placing the emphasis on what needs to be done long before a fire starts, the Fire Plan looks to reduce firefighting costs and property losses, increase firefighter safety, and to contribute to ecosystem health.

2012 Central Valley Flood Protection Plan (DWR)

The Central Valley Flood Protection Plan (CVFPP) guides the State's investment in flood management in the Sacramento and San Joaquin River basins and provides a basis for coordinating with federal and local agencies in implementation. Prepared with significant public input, the CVFPP identifies a systemwide investment approach for sustainable, integrated flood management, focusing on areas currently protected by facilities of the State Plan of Flood Control (SPFC). Utilizing the most comprehensive evaluations to date for flood damage reduction,

Table 4-3 Featured State Plans Featured in Update 2013

Featured State Plans	Agency
2010 Strategic Fire Plan for California	CAL FIRE 2010
2012 Central Valley Flood Protection Plan	Department of Water Resources 2012
2013 Integrated Energy Policy Report	California Energy Commission 2012
Alluvial Fan Task Force, Findings and Recommendations Report	Alluvial Fan Task Force 2010
Bay Delta Conservation Plan – Public Draft	Bay Delta Conservation Plan Steering Committee, currently being developed
California Agriculture Vision: Strategies for Sustainability	California Department of Food and AgricultureA 2010
California Drought Contingency Plan	Department of Water Resources 2010
California Native American Tribal Engagement in the California Water Plan Update 2013 - Tribal Engagement Plan	Calfiornia Water Plan, Tribal Advisory Committee, Draft Nov. 2010
California Ocean Protection Council Five-Year Strategic Plan 2012-2017	Ocean Protection Council
California Outdoor Recreation Plan 2008: An Element of the California Outdoor Recreation Planning Program	State Parks 2009
California's Forest and Rangelands: 2010 Assessment and 2010 Strategy Report	CAL FIRE 2010
California Strategic Growth Council Strategic Plan 2012-2014	California Strategic Growth Council 2012
California's Flood Future: Recommendations for Managing the State's Flood Risk	Department of Water Resources 2013 Draft
California's Water Commission Strategic Plan 2012	California Water Commission 2012
California Transportation Plan 2025 (April 2006) and 2030	Caltrans Oct. 2007
California Wildlife Action Plan	California Department of Fish and Wildlife 2007
Climate Change Scoping Plan: A Framework for Change	California Air Resources Board, currently being updated
Delta Plan	Delta Stewardship Council 2013
Department of Toxic Substances Control 2011-2016 Strategic Plan	Department of Toxic Substances Control
Environmental Goals and Policy Report	Governor's Office of Planning and Research, currently being developed
General Plan Guidelines	Governor's Office of Planning and Research, currently being updated
Recycled Water Policy	State Water Resources Control Board 2009

Featured State Plans	Agency
Regional Water Quality Control Plans (Basin Plans)	Regional Water Quality Control Boards
Safeguarding California Plan – Public Draft	California Natural Resources Agency, currently being updated
San Francisco Bay/Sacramento – San Joaquin Delta Estuary Water Quality Control Plan	State Water Resources Control Board, currently being updated
Sierra Nevada Conservancy Strategic Plan	Sierra Nevada Conservancy 2011
Sierra Nevada Conservancy 2013-14 Action Plan	Sierra Nevada Conservancy 2012
Small Water System Program Plan	California Department of Public Health 2012
State Coastal Conservancy Strategic Plan 2013-2018	California Coastal Conservancy 2012
State of California Emergency Plan	Cal EMA 2009
State of California Multi-Hazard Mitigation Plan	Cal EMA 2010
Strategic Plan for the Future of Integrated Regional Water Management	Department of Water Resources, currently being developed
The Climate Action Plan of the Sierra Nevada: A regional Approach to Address Climate Change	Sierra Nevada Conservancy 2009
Threat and Hazard Identification and Risk Assessment	Cal EMA, currently being developed
Water Action Plan	California Public Utilities Commission 2010
Water Boards Strategic Plan 2008-2012	State Water Resources Control Board 2008

potential life loss, and environmental restoration opportunities, it guides flood management investments in the range of $14 to $17 billion during the next 20 to 25 years.

The primary goal of the CVFPP is to improve flood risk management by reducing the chance and consequences of flooding and improve public safety, preparedness, and emergency response. The CVFPP also includes the following supporting goals:

- Improve operations and maintenance.
- Promote ecosystem functions.
- Improve institutional support.
- Promote multi-benefit projects.

Prepared by DWR and adopted by the Central Valley Flood Protection Board, the CVFPP is updated every five years, with each update providing support for subsequent policy, program, and project implementation. Implementation of the plan will require preparation of regional- and State-level financing plans.

2013 Integrated Energy Policy Report (California Energy Commission)

Senate Bill 1389 (Chapter 568, Statutes of 2002) requires the California Energy Commission to prepare a biennial integrated energy policy report that contains an assessment of major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources, protect the environment, ensure reliable, secure, and diverse energy supplies, enhance the state's economy, and protect public health and safety. The Energy Commission prepares these assessments and associated policy recommendations every two years as part of the *Integrated Energy Policy Report*. Preparation of this report involves close collaboration with federal, State, and local agencies and a wide variety of stakeholders in an extensive public process to identify critical energy issues and develop strategies to address those issues.

Alluvial Fan Task Force, Findings, and Recommendations Report (Alluvial Fan Task Force)

The Alluvial Fan Task Force (AFTF) was established by legislation and charged DWR with appointing a diverse stakeholder group that would examine the unique flood risks and environmental issues associated with development on alluvial fans and also provide recommendations to the Legislature to reduce flood risks and unintended environmental consequences in future development on alluvial fans. Throughout the AFTF process, the members collaborated to identify general findings that local governments should consider when planning for or considering future development on alluvial fans. Based on these findings, fourteen recommendations emerged that the State and other public agencies should consider when planning for or considering future development on alluvial fans. (See *Alluvial Fans Task Force Findings and Recommendations Report* at http://aftf.csusb.edu/documents/FINDINGS_Final_Oct2010_10-29-10_web.pdf.)

Bay Delta Conservation Plan

The proposed Bay Delta Conservation Plan (BDCP) is a comprehensive conservation strategy designed to address critical environmental and water delivery issues in the Sacramento-San Joaquin Delta with an ecosystem-based approach. The BDCP supports the coequal goals of habitat restoration and reliable water supply set forth in the Sacramento-San Joaquin Delta Reform Act of 2009.

The BDCP is a Habitat Conservation Plan and Natural Community Conservation Plan developed in compliance with the federal Endangered Species Act and the California Natural Community Conservation Planning Act. The plan would be implemented over a 50-year period and seeks long-term take permits. As a planning document, the BDCP describes the proposed actions to improve the condition of habitat and species in the Delta, reduce adverse effects of water diversions on the covered species, and provide a reliable water supply.

While the BDCP is meant to be beneficial to the environment, specific actions in the plan can have an impact on natural and human environments. These impacts must be evaluated and actions identified to mitigate them. State and federal environmental laws require a review of potential impacts of the BDCP before it can be approved and implemented. As a result, the BDCP Environmental Impact Report/Environmental Impact Statement (EIR/EIS) was prepared in

compliance with the California Environmental Quality Act and the National Environmental Policy Act.

The BDCP, the EIR/EIS, and supporting documentation will provide the basis for informed decision-making, including applications for issuance of endangered species incidental take permits for facility and operational changes to the State Water Project.

California Agriculture Vision: Strategies for Sustainability (Department of Food and Agriculture)

Agriculture Vision, aka AgVision, is more than a set of policy recommendations. It is a platform for thoughtful engagement of diverse stakeholder views about California's food and agriculture system, and it is a call for leadership by all those concerned about the future of California agriculture and its continued critical role.

California Drought Contingency Plan (DWR)

The California Drought Contingency Plan is a statewide plan for minimizing drought impacts by improving agency coordination, enhancing monitoring and early warning capabilities, water shortage impact assessments, and preparedness, response, and recovery programs. The plan identifies an integrated, regional approach to addressing drought, drought action levels, and appropriate agency responses as drought conditions change.

California Native American Tribal Engagement in the California Water Plan Update 2013 — Tribal Engagement Plan (CWP Tribal Advisory Committee)

The California Water Plan Update 2013 Tribal Engagement Plan continues the relationships built between State agencies and California Native American Tribes during Update 2009. The Tribal Engagement Plan is not a consultation process, but a document for how Update 2013 intends to build on the work from Update 2009 in approaching its goal of increasing tribal involvement. The objectives for engaging California Native American Tribes in Update 2013 include:

1. Begin addressing the complex tribal water issues identified during Update 2009, including at the 2009 Tribal Water Summit and in Objective 12 of the Update 2009 Strategic Plan (see Volume 1, Chapter 7 of Update 2009).
2. Integrate tribal information and tribal perspectives in the CWP, including but not limited to *The Strategic Plan, Regional Reports, and Resource Management Strategies*.
3. Improve the overall quality and comprehensiveness of the CWP, making it a more relevant and useful document.
4. Educate many water professionals about tribal water issues and water management strategies.
5. Increase tribal inclusion and engagement in water planning throughout California.

California Ocean Protection Council Five-Year Strategic Plan 2012-2017 (Ocean Protection Council)

In 2012, the Ocean Protection Council (OPC) released a 5-year update to their original strategic plan. The OPC was created through the California Ocean Protection Act (COPA) in 2004 to help protect, conserve, and maintain healthy coastal and ocean ecosystems and the economies they support. The OPC works with diverse interests and provides the leadership needed to meet the accelerating and complex contemporary challenges as set forth in COPA. The new strategic plan for fiscal year 2012-2013 through fiscal year 2016-2017 proposes OPC action in areas of critical need where the council's involvement can yield tangible progress and have the greatest impact. The OPC will focus on five areas over the next five years:

1. Science-based decision-making.
2. Climate change.
3. Sustainable fisheries and marine ecosystems.
4. Coastal and ocean impacts from land-based sources.
5. Existing and emerging ocean uses.

California Outdoor Recreation Plan (Department of Parks and Recreation)

The California Outdoor Recreation Plan (CORP) is the State's strategy for identifying the wide range of ways in which recreation providers can deal with obstacles and create the outdoor recreation opportunities to meet current and future public demand. The CORP and associated research provide strategies for all public agencies (federal, State, local, and special districts engaged in providing outdoor recreation lands, facilities and services throughout the state) for meeting the outdoor recreation needs of Californians. The CORP presents valuable information about participation, and demand for water-dependent outdoor recreation activities including fishing, motor boating, paddle sports, and swimming. The plan inventories protected lands throughout the state, compiles public opinions about outdoor recreation and the management of public waters and lands, describes why wetlands are important recreation resources, and addresses the California Recreation Policy.

California Forest and Rangelands: 2010 Assessment and 2010 Strategy Report (Department of Forestry and Fire Protection)

The report, *California's Forests and Rangelands: 2010 Assessment*, has been completed by CAL FIRE's Fire and Resource Assessment Program (FRAP). It highlights key policy issues and options for the subsequent strategy document, which provides the framework for State and federal programs that support good forest and rangeland stewardship in California.

California Strategic Growth Council Strategic Plan 2012-2014 (California Strategic Growth Council)

This strategic plan lays out a comprehensive three-year work plan for the California Strategic Growth Council. It also defines the council's vision, mission, and various roles and responsibilities. The work plan is based on four strategies that follow the legislative mandates of the Strategic

Growth Council. The strategies are supported by 12 actions identified to accomplish the strategic objectives. To enhance common understanding, a high-level description is provided of the purpose and proposed methods for accomplishing each action.

California's Flood Future: Recommendations for Managing the State's Flood Risk (DWR)

DWR and the USACE developed *California's Flood Future: Recommendations for Managing the State's Flood Risk*, a comprehensive look at statewide exposure to flood risk. The report identifies and addresses the barriers to improved flood management and provides information intended to inform decisions about policies and financial investments to improve public safety, foster environmental stewardship, and support economic stability. Information used to develop *California's Flood Future* was provided by more than 140 public agencies.

California's Water Commission Strategic Plan 2012 (California Water Commission)

The California Water Commission's Strategic Plan 2012 outlines California's water challenges and the California Water Commission's goals and strategies to address those challenges. The plan discusses critical issues in California's water management, the history of the commission, and defines its roles and duties. It also highlights the commission's newly adopted mission statement, major goals, and strategies for achieving those goals.

California Transportation Plan 2025 (Department of Transportation)

The California Transportation Plan (CTP) is a statewide, long-range transportation plan for meeting the state's future mobility needs. The CTP defines goals, policies, and strategies to achieve a collective vision for California's future transportation system. This plan, with a minimum 20-year planning horizon, is prepared in response to federal and State requirements and is updated every five years. The current CTP 2025 was approved in 2006 and updated by an addendum in October, 2007, to comply with new federal planning requirements governing development of the plan.

California Wildlife Action Plan (Department of Fish and Wildlife and Wildlife Health Center at University of California, Davis)

The California Department of Fish and Wildlife, working in partnership with the Wildlife Health Center at University of California, Davis, directed the development of *California Wildlife: Conservation Challenges*. This report identifies species of habitats of greatest conservation need, the major stressors affecting native wildlife and habitats, and statewide and region-specific actions needed to restore and conserve California's wildlife.

Climate Change Scoping Plan: A Framework for Change (California Air Resources Board)

The Global Warming Solutions Act of 2006 (AB 32) required the ARB to prepare a scoping plan to achieve reductions in greenhouse gas (GHG) emissions in California. The AB 32 Scoping Plan,

approved by the ARB in December 2008, provides the outline for actions to reduce California's GHG emissions. ARB is in the process of updating the Scoping Plan and its discussion draft for public review and comment was released in October 2013. The update to the Scoping Plan builds upon the initial Scoping Plan with new strategies and recommendations including: 1) define ARB climate change priorities for the next five years and lay the groundwork to reach post-2020 goals, 2) identify opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low-carbon investments, and 3) evaluate how to align the State's "longer-term" GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use. The water sector aspect of the Scoping Plan Update assesses progress toward the 2020 goal and provides the current status of each water measure, including water use efficiency, water recycling, water system energy efficiency, reuse urban runoff, renewable energy production, and water public goods charge. It also provides recommendations to the transition beyond 2020 with balanced multiple policy objectives across a wide spectrum of State water- and climate-planning documents, such as the AB 32 Scoping Plan, the Safeguarding California Plan for preparing for climate risks, the California Water Plan, the Delta Plan, the Bay Delta Conservation Plan, and the Integrated Regional Water Management Strategic Plan.

Department of Toxic Substances Control Strategic Plan 2011-2016 (Department of Toxic Substances Control)

The Department of Toxic Substances Control's (DTSC's) strategic plan is a living document. It is aligned with their operations and is designed to focus on safeguarding communities, protecting the health of all residents, restoring land and water to safe levels, and maximizing effectiveness and efficiency to better serve Californians. Immediate threats are mitigated by protecting the public and/or implementing enforcement action. Long-term threats are mitigated by removing exposure or are avoided by substituting safer consumer products. Threats may be in the air, soil, or water on tribal, federal, State or private lands. Mitigating these threats requires DTSC to work across organizational boundaries with local, State, federal and national organizations. DTSC also administers the federal Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Superfund programs for the EPA, and manages orphan funds designated for use to clean up abandoned and/or neglected properties that can be usefully re-developed.

Environmental Goals and Policy Report (Governor's Office of Planning and Research)

The discussion draft of the 2013 Environmental Goals and Policy Report (EGPR) provides an overview of the State's environmental goals, keys steps to achieving these goals, and a framework of metrics and indicators to help inform decision-making at all levels to help the State to reach these goals.

Delta Plan (Delta Stewardship Council)

The 2009 Delta Reform Act created the Delta Stewardship Council and required that it develop a legally enforceable, long-term management plan for the Delta to achieve the coequal goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. These coequal goals must be achieved in a manner that protects and enhances

the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place. The Delta Plan focuses on a number of key strategies to achieve these coequal goals. State and local agencies undertaking covered actions are required to make such covered actions be consistent with the Delta Plan.

General Plan Guidelines (Governor's Office of Planning and Research)

Governor's Office of Planning and Research (OPR) has begun its update of the *2003 General Plan Guidelines*. This document provides assistance to local governments for developing their long-range general plans. The update will include pertinent new statutory and legal requirements along with advice for planners, elected officials, and the general public on how a general plan can be used to achieve a sustainable, livable community.

Recycled Water Policy (State Water Resources Control Board)

The Recycled Water Policy was adopted by SWRCB in 2009 and is intended to increase the use of recycled water from municipal wastewater sources in support of the SWRCB's Strategic Plan priority to promote sustainable local water supplies. Increasing the acceptance and promoting the use of recycled water is a means towards achieving sustainable local water supplies and can result in reduction in greenhouse gases, a significant driver of climate change. The policy is also intended to encourage beneficial use of recycled water.

Regional Water Quality Control Plans (Ten Basin Plans — State Water Resources Control Board)

The water quality control plans, or basin plans, for the 10 hydrologic regions are the State's water quality control planning documents. They designate the beneficial uses and water quality objectives for all surface water and groundwater. They also include implementation programs to achieve water quality objectives. Basin plans are developed and adopted by the regional water quality control boards and then approved by the SWRCB, the EPA, and the Office of Administrative Law, where required.

Safeguarding California Plan (Natural Resources Agency)

The Safeguarding California Plan will be an update to the 2009 California Climate Adaptation Strategy. This plan will build upon efforts to reduce and prepare for climate risks by providing a multi-sector framework to reduce climate risk. It is designed to work in conjunction with more in-depth, sector-specific climate planning and risk reduction activities and also fits into a broader suite of coordinated State actions on climate change. This plan is designed to provide policy guidance for State decision-makers, highlighting climate risks in nine sectors in California: 1) Agriculture, 2) Biodiversity and Habitat, 3) Emergency Management, 4) Energy, 5) Forestry, 6) Ocean and Coastal Ecosystems and Resources, 7) Public Health, 8) Transportation, and 9) Water. Progress to date, as well as sector-specific and cross-sector recommendations, are all discussed in the plan. The draft plan was released in December 2013.

San Francisco Bay/Sacramento — San Joaquin Delta Estuary Water Quality Control Plan (State Water Resources Control Board)

In December 2007 and January 2008, resolutions adopted by the SWRCB directed staff to develop a strategic work plan that describes the coordinated activities of the SWRCB to address Bay-Delta issues, prioritizes the scope of individual activities, and specifies timelines and resource needs. It describes high-priority Bay-Delta activities that the SWRCB will continue through 2013.

The SWRCB recognizes that it has neither the capacity nor the responsibility to conduct all the planning and implementation activities needed to protect and restore fisheries, aquatic habitats, and other beneficial uses in the Bay-Delta. Accordingly, the work plan identifies activities that will need to be coordinated with other efforts. Overall, the work plan identifies a range of actions that constitute a reasonable sharing of responsibility to protect the Bay-Delta and the public trust, while still protecting diverse public interests.

Sierra Nevada Conservancy Strategic Plan (Sierra Nevada Conservancy)

The Sierra Nevada Conservancy Strategic Plan 2013 sets priorities for the conservancy within the context of its broad mission and statutorily established program areas, and focuses efforts on measurable and attainable actions over the next three years. This plan, to be implemented in ongoing collaboration with multiple partners, will be carried out through specific actions identified in a series of annual work plans, beginning with the Sierra Nevada Conservancy's 2013-14 Action Plan that establish realistic actions by fiscal year in support of the established priorities.

Sierra Nevada Conservancy 2013-14 Action Plan (Sierra Nevada Conservancy)

The Action Plan contains the major initiatives and activities to be undertaken by the Sierra Nevada Conservancy between July 2013 and June 2014, consistent with the Sierra Nevada Conservancy Strategic Plan.

Small Water System Program Plan (California Department of Public Health)

California Department of Public Health (CDPH) has developed a Small Water System Goal that brings small community water systems into sustainable compliance with primary drinking water standards. CDPH has developed an implementation plan that defines specific tasks to achieve the goal as well as measureable results of progress. CDPH will focus on third-party provider services and internal efforts toward these systems in order to bring them into compliance. The intent is to direct attention and resources toward these systems to help them find a solution and develop their technical, managerial, and financial capacity that will ensure sustainability into the future.

State Coastal Conservancy Strategic Plan 2013-2018 (California Coastal Conservancy)

The California Coastal Conservancy's 2013-2018 Strategic Plan identifies key issues for the California coast over the next five years including the steps needed to respond to climate change. The plan includes an overview of agency priorities in the context of California's coastal management program, a delineation of coastal issues by region, and a summary of the

agency's financial status and needs. The plan describes the conservancy's overall vision and identifies specific metrics to measure the effectiveness of the Coastal Conservancy's work. In addition, it includes a summary of the Coastal Conservancy's past accomplishments.

State of California Emergency Plan (California Emergency Management Agency)

The State of California Emergency Plan outlines a State-level strategy in support of local government efforts to protect the public during a large-scale emergency. In accordance with the California Emergency Services Act, the State Emergency Plan describes:

1. Methods for carrying out emergency operations.
2. The process for rendering mutual aid.
3. Emergency services of governmental agencies.
4. How resources are mobilized.
5. Public information.
6. Continuity of government.

The plan is intended to establish statewide emergency management policy and provide guidance and standardization for use by all stakeholders.

State Multi-Hazard Mitigation Plan (California Emergency Management Agency)

Cal EMA led the effort to complete the 2013 Enhanced State of California Multi-Hazard Mitigation Plan (SHMP), which includes a flood component. The SHMP is the official statement of the State's hazard identification, vulnerability analysis, and hazard mitigation strategy. The SHMP is the result of a collaborative multi-agency planning process that included DWR.

Strategic Plan for the Future of Integrated Regional Water Management (DWR)

The purpose of this new plan is to advance IRWM, further enable, empower, and support regional water management groups, and better align State and federal programs to support IRWM. There has been ten years of progress implementing IRWM. Developing this plan further will involve significant engagement of stakeholders to review the progress made and plan for the future, especially considering possible future funding challenges.

The Climate Action Plan of the Sierra Nevada: A Regional Approach to Address Climate Change (Sierra Nevada Conservancy)

This is a regional climate plan developed by the Sierra Nevada Conservancy with direction from the Sierra Nevada Conservancy Governing Board, the secretary of the California Natural Resources Agency, and the governor. It provides a Sierra Nevada perspective and further defines region-specific needs and roles in assessing, mitigating, and adapting to the current and anticipated effects of climate change on the region's ecosystems, habitats, species, and natural and human-made resources and communities. The plan synthesizes information and provides strategies

and actions for integrating, supporting, and enhancing existing programs and projects in key areas including water, forest/fire, habitat/biodiversity, biomass, and energy efficiency. The conservancy's Climate Action Plan will integrate and coordinate efforts to create economies of scale, share resources and expertise, and maximize the benefits for the region.

Threat and Hazard Identification and Risk Assessment (California Emergency Management Agency)

The Threat and Hazard Identification and Risk Assessment is an annual report that began in 2012. It is a process for identifying community-specific threats and hazards and setting capability targets for each core capability identified in the National Preparedness Goal as required in Presidential Policy Directive 8. One of the core capabilities is response and recovery of key infrastructure systems during an emergency which include water and wastewater systems.

Water Action Plan (Public Utilities Commission)

The Water Action Plan sets forth the California Public Utilities Commission's (CPUC) policy objectives for the regulation of investor-owned water utilities and highlights the actions the CPUC will take to implement these objectives. The Water Action Plan has four key principles:

1. Safe, high quality water.
2. Highly reliable water supplies.
3. Efficient use of water.
4. Reasonable rates and viable utilities.

Water Boards Strategic Plan 2008-2012 (State Water Resources Control Board)

In 2008, the SWRCB and the nine regional water quality control boards released an update of their strategic plan. Reflecting the many changes to the environmental regulatory landscape that occurred since publication of the Water Boards 2001 Strategic Plan, the new plan highlights key actions to reduce fragmentation and leverage resource. The plan institutionalizes processes to evaluate consistency and effectiveness continuously of program implementation across the State and regional water quality control boards. Most of the actions of the plan to manage and protect the State's water resources will be implemented within watersheds to eliminate fragmented management approaches. Considering trends and challenges, the Water Boards Strategic Plan Update is designed to support functioning, sustainable watersheds where progress can be measured through environmental goals of healthy surface water and groundwater, and increasing reliance on sustainable water supplies.

El Dorado Hills Branch LIbrary uses recycled water in their water features and to irrigate the surrounding landscaping.
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CWP Objectives and Related Actions

The objectives and related actions presented in Chapter 8, "Roadmap For Action," are taken, in part, from the

featured State agency plans and the various topic caucuses. Many objectives and related actions derived from featured State agency plans were developed to meet various resource management and communication goals.

Table 4-4 (below) shows the featured plans that have content related to the CWP objectives and related actions found in Chapter 8, "Roadmap For Action."

Resource Management Strategies

The featured State plans have multiple connections with the Update 2013 Volume 3, *Resource Management Strategies*. Table 4-5 (below) shows how each featured plan relates to the resource management strategy categories. Several featured plans have crosscutting recommendations, such as the need to both improve water quality and practice resource stewardship.

Implications and Considerations

The new complexities of managing water resources require rigorous, collaborative, and multidisciplinary approaches. The formation of the Tribal Advisory Committee, outreach to federal agencies through joint planning efforts, collaboration with the California Biodiversity Council, and continued expansion of the State Agency Steering Committee furthers better alignment of California's water management. The continued inclusion of featured plans has already paid dividends, as many State agencies are now cross-referencing and engaging the CWP process in creating these plans. Federal agencies are also participating in joint outreach and planning efforts on items of mutual concern. The statewide, broad adoption of IRWM planning has improved collaboration and achieved new insights on ways regions can work together to achieve their goals. Much work remains, but the efforts of the Update 2013 process offers new ways of working together to enhance many existing processes.

Table 4-4 Matrix of Featured Plans and Related Objectives

Title	Agency	Water Plan Objectives
2010 Strategic Fire Plan for California	CAL FIRE	8
2012 Central Valley Flood Protection Plan	DWR	6, 8, 13, 14, 15
2013 Integrated Energy Policy Report	CEC	2, 9
Alluvial Fan Task Force, Findings and Recommendations Report	AFTF	1, 6, 10, 14, 15, 16
Bay Delta Conservation Plan — Public Draft	BDCP-SC	7
California Agriculture Vision: Strategies for Sustainability	CDFA	2, 5, 9, 15, 16
California Drought Contingency Plan	DWR	2, 8, 10
California Native American Tribal Engagement in the California Water Plan Update 2013 - Tribal Engagement Plan[a]	TAC	12
California Ocean Protection Council Five-Year Strategic Plan 2012-2017	OPC	5, 10, 15, 16
California Outdoor Recreation Plan 2008	State Parks	14
California Forests and Rangelands: 2010 Assessment and 2010 Strategy Report	Cal Fire	5, 11, 16
California Strategic Growth Council Strategic Plan 2012-2014	SGC	10, 14, 15, 16
California's Flood Future: Recommendations for Managing the State's Flood Risk	DWR	6, 8, 14, 15, 16
California's Water Commission Strategic Plan 2012	CWC	7, 12, 16
California Transportation Plan 2025 and 2030	Caltrans	1, 4
California Wildlife Action Plan	CDFW	5, 15
Climate Change Scoping Plan: A Framework for Change	CARB	9
Delta Plan	DSC	1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 14, 16
Department of Toxic Substances Control Strategic Plan 2011-2016	DTSC	16
Environmental Goals and Policy Report	OPR	5
General Plan Guidelines	OPR	15
Recycled Water Policy	SWRCB	2, 4, 14
Regional Water Quality Control Plans (10 Basin Plans)	SWRCB	4
Safeguarding California Plan	CNRA	9, 15
San Francisco Bay/Sacramento – San Joaquin Delta Estuary Water Quality Control Plan	SWRCB	7
Sierra Nevada Conservancy Strategic Plan	SNC	5, 14

Title	Agency	Water Plan Objectives
Sierra Nevada Conservancy 2013-14 Action Plan	SNC	5
Small Water System Program Plan	CDPH	13
State Coastal Conservancy Strategic Plan 2013-2018	CCC	5, 14, 16
State of California Emergency Plan	Cal EMA	8, 16
State Multi-Hazard Mitigation Plan	Cal EMA	8, 15
Strategic Plan for the Future of Integrated Regional Water Management	DWR	1
The Climate Action Plan of the Sierra Nevada: A Regional Approach to Address Climate Change	SNC	3, 15
Threat and Hazard Identification and Risk Assessment	Cal EMA	8
Water Action Plan	CPUC	2, 4, 13, 14, 16
Water Boards Strategic Plan 2008-2012	SWRCB	4

Notes:

CAL FIRE = California Department of Forestry and Fire Protection, DWR = California Department of Water Resources, CEC = California Energy Commission, AFTF = Alluvial Fan Task Force, BDCP-SC = Bay Delta Conservation Plan - Delta Stewardship Council, CDFA = California Department of Food and Agriculture,TAC = Tribal Advisory Committee, OPC = California Ocean Protection Council, State Parks = California Department of Parks and Recreation, SGC = California Strategic Growth Council, CWC = California's Water Commission, Caltrans = California Department of Transportation, CARB = California Air Resources Board, DTSC = Department of Toxic Substances Control, OPR = Governor's Office of Planning and Research, DSC = Delta Stewardship Council, SWRCB = State Water Resource Control Board, CNRA = California Natural Resources Agency, SNC = Sierra Nevada Conservancy, DPH = California Department of Public Health, CCC = California Coastal Conservancy, Cal EMA = California Emergency Management Agency, CPUC = California Public Utilities Commission

[a] This is a stakeholder generated plan rather than a State agency plan.

Table 4-5 Matrix of Featured Plans and Resource Management Strategy Categories

Title	Agency	Reduce Water Demand	Improve Operational Efficiency and Transfers	Increase Water Supply	Improve Water Quality	Practice Resource Stewardship	Improve Flood Mgmt.	People and Water
2010 Strategic Fire Plan for California	CAL FIRE					X		
2012 Central Valley Flood Protection Plan	DWR					X	X	
2013 Integrated Energy Policy Report	CEC	X	X					
Alluvial Fan Task Force, Findings and Recommendations Report	AFTF					X	X	X
Bay Delta Conservation Plan — Public Draft	BDCP-SC		X		X	X		
California Agriculture Vision: Strategies for Sustainability	CDFA	X	X	X	X	X		X
California Drought Contingency Plan	DWR	X	X					
California Native American Tribal Engagement in the CWP Update 2013 – Tribal Engagement Plan	TAC							X
California Ocean Protection Council Five-Year Strategic Plan 2012-2017	OPC	X	X	X	X	X	X	X
California Outdoor Recreation Plan 2008	State Parks					X		X
California Forests and Rangelands: 2010 Assessment and 2010 Strategy Report	CAL FIRE				X	X		X
California Strategic Growth Council Strategic Plan 2012-2014	SGC					X		X

Title	Agency	Reduce Water Demand	Improve Operational Efficiency and Transfers	Increase Water Supply	Improve Water Quality	Practice Resource Stewardship	Improve Flood Mgmt.	People and Water
California's Flood Future: Recommendations for Managing the State's Flood Risk	DWR				X	X	X	X
California's Water Commission Strategic Plan 2012	CWC		X					X
California Transportation Plan 2025 and 2030	Caltrans				X	X		
California Wildlife Action Plan	CDFW				X	X		X
Climate Change Scoping Plan: A Framework for Change	CARB					X		
Department of Toxic Substances Control Strategic Plan 2011-2016	DTSC				X			
Environmental Goals and Policy Report	OPR	X			X	X		
Delta Plan	DSC	X	X	X	X	X	X	X
General Plan Guidelines	OPR				X	X	X	
Recycled Water Policy	SWRCB	X		X	X			
Regional Water Quality Control Plans (10 Basin Plans)	SWRCB				X	X	X	
Safeguarding California Plan	CNRA				X	X		X
San Francisco Bay/Sacramento — San Joaquin Delta Estuary Water Quality Control	SWRCB		X	X	X	X		
Sierra Nevada Conservancy Strategic Plan	SNC					X		X

Title	Agency	Reduce Water Demand	Improve Operational Efficiency and Transfers	Increase Water Supply	Improve Water Quality	Practice Resource Stewardship	Improve Flood Mgmt.	People and Water
Sierra Nevada Conservancy 2013-14 Action Plan	SNC					X		X
Small Water System Program Plan	DPH				X			
State Coastal Conservancy Strategic Plan 2013-2018	CCC				X	X	X	X
State of California Emergency Plan	Cal EMA						X	
State Multi-Hazard Mitigation Plan	Cal EMA				X	X	X	X
Strategic Plan for the Future of Integrated Regional Water Management	DWR	X	X	X	X	X	X	X
The Climate Action Plan of the Sierra Nevada: A regional Approach to Address Climate Change	SNC			X	X	X		X
Threat and Hazard Identification and Risk Assessment	Cal EMA						X	
Water Action Plan	CPUC	X		X	X			X
Water Boards Strategic Plan 2008-2012	SWRCB	X		X	X	X	X	

Notes:

CAL FIRE = California Department of Forestry and Fire Protection, DWR = California Department of Water Resources, CEC = California Energy Commission, AFTF = Alluvial Fan Task Force, BDCP-SC = Bay Delta Conservation Plan Delta Stewardship Council, CDFA = California Department of Food and Agriculture, TAC = Tribal Advisory Committee, OPC = California Ocean Protection Council, State Parks = California Department of Parks and Recreation, SGC = California Strategic Growth Council, CWC = California's Water Commission, Caltrans = California Department of Transportation, CARB = California Air Resources Board, DTSC = Department of Toxic Substances Control, OPR = Governor's Office of Planning and Research, DSC = Delta Stewardship Council, SWRCB = State Water Resource Control Board, CNRA = California Natural Resources Agency, SNC = Sierra Nevada Conservancy, DPH = California Department of Public Health, CCC = California Coastal Conservancy, Cal EMA = California Emergency Management Agency, CPUC = California Public Utilities Commission

Additional State and other government plans are referenced in Volume 3, *Resource Management Strategies*.

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